

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

|   |  |  |
|---|--|--|
| (51) International Patent Classification <sup>7</sup> :<br><br>H04Q 7/38  |  | (11) International Publication Number: <b>WO 00/38461</b>    |
|   |  | (43) International Publication Date: 29 June 2000 (29.06.00) |
| <p>(21) International Application Number: PCT/FI99/01063</p> <p>(22) International Filing Date: 21 December 1999 (21.12.99)</p> <p>(30) Priority Data:<br/>982762 21 December 1998 (21.12.98) FI</p> <p>(71) Applicant (for all designated States except US): NOKIA NETWORKS OY [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).</p> <p>(72) Inventor; and</p> <p>(75) Inventor/Applicant (for US only): PALVIAINEN, Keijo [FI/FI]; Halmetie 6 A, FIN-00700 Helsinki (FI).</p> <p>(74) Agent: KOLSTER OY AB; Iso Roobertinkatu 23, P.O. Box 148, FIN-00121 Helsinki (FI).</p>   |  |  |
| <p>(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (Utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published<br/><i>Without international search report and to be republished upon receipt of that report.</i></p>  |  |  |
| <p>(54) Title: CALL ROUTING</p> <pre> graph LR     HLR[HLR] -- 2.3 --&gt; VLR[2.4 VLR]     VLR -- 2.5 --&gt; GMSC[GMSC]     GMSC -- 2.2 --&gt; HLR     GMSC -- 2.6 --&gt; MSC[MSC]     GMSC -- L2 --&gt; MSC     GMSC -- 2.8 --&gt; VLR     GMSC -- 2.9 --&gt; MS[MS]     GMSC -- 2.10 --&gt; MS     GMSC -- 2.11 --&gt; MSC     MSC -- L1 --&gt; CONVERSION[CONVERSION]     CONVERSION -- 2.7 --&gt; MSC   </pre>  |  |  |
| <p>(57) Abstract</p> <p>The present invention relates to a mobile communication system comprising: at least one subscriber database (HLR) containing subscriber data, and exchanges (GMSC, MSC) connected to each other by communication paths (L1, L2), at least one of said exchanges (GMSC) comprising means for transmitting a request (2.2) to said subscriber database (HLR), said request including at least a B-subscriber number of a terminating call. To provide a system which is capable of selecting the optimum communication path for a terminating call said subscriber database (HLR) comprises means for retrieving and transmitting to said exchange (GMSC) a basic service code that corresponds to the B-subscriber number included in the request (2.2), and said exchange (GMSC) comprises means (1) for routing said terminating call to the B-subscriber number by using communication paths (L1) that fulfill the property requirements of the call type indicated by said basic service code.</p> |  |  |